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10/058,173	01/25/2002	Steven M. Stefanik	PALM-3779	5622

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ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 April 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1 – 45 are pending in the application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   **Claims 1-10, 14-17, 21, 37 and 42-45 are rejected under 35 U.S.C. 103(a) as**

being unpatentable over U. S. Patent No. 6,006,034 to Heath et al. (hereinafter

referred to as Heath, cited in the previous office action) in view of U.S. Patent

Application Publication No. 2002/0069263 to Sears et al. (hereinafter referred to as

Sears).

4.   As to claim 1, Heath discloses the invention substantially as claimed including a

method of software distribution comparing:

demarking (selecting) a subset of a plurality of files (objects) stored on a first

hand held to denote a demarked plurality of files (E.g. see Heath - col. 1:50-55,

selecting to download and update on the needed; and at col. 4:46-78 selectively identify

and retrieve required components); and

transferring information of said demarked plurality of files to a second hand held

computer system (E.g. see Heath - Fig. 3A Retrieve catalog file from server using

launcher 302, and at col. 4:46-48).

5.   Although Heath discloses the invention substantially as claimed, Heath does not

specifically teach a user interface for demarking a subset of files.

However, Sears discloses disseminating information to mobile devices (p. 3,

paragraph 0022), and a user interface (user interface on device 140, p. 5 – 6, paragraph

0042) for demarking a subset of a plurality of files (requested applications, p. 5 – 6,

paragraph 0042).

6.   It would have been obvious to a person of ordinary skill in the art at the time of

the invention to apply the teaching of a user interface for demarking a subset of files as

taught by Sears to the invention of Heath because this allows for seamless and

optimized interactions to occur between users, devices, providers, and applications

located in a network environment (p. 1, paragraph 0002 of Sears).

7.   As to claim 2, Heath further discloses wherein said demarked plurality of files

comprises executable program instructions (E.g. see Heath - col. 1:56-62, executable

codes, library files).

8.   As to claim 3, Heath further discloses wherein said demarked plurality of files

comprises non-executable information (E.g. see Heath - col. 1:56-62, parameter files,

and data files).

9. ʼ   As to claim 4, Heath further discloses wherein said information of said demarked

plurality of files comprises a rating of said demarked plurality of files (E.g. see

Heath - Fig. 3A:302-306, Fig. 2B, col. 3:7-20, Information in the downloaded catalog file,

which at least includes the list of names and version... information such as rating, for the

purpose of sharing, could very well included in the catalog).

10.   As to claim 5, Heath further discloses wherein said information of said demarked

plurality of files comprises titles (names) of said demarked plurality of files

(E.g. see Heath - col. 3:12-15, includes the list of names and version id).

11.   As to claim 6, Heath further discloses wherein said information of said demarked

plurality of files comprises storage requirements of said demarked plurality of files (E.g.

see Heath - col. 4:64-5:4, the catalog file includes at 324 a version identification, code

or data size).

12.   As to claim to claims 7 and 8, Heath further discloses wherein said information of

said demarked plurality of files comprises an alphanumerical summary of said

demarked plurality of files (E.g. see Heath - col. 3:7-20, Information in the downloaded

catalog file, which at least includes the list of names and version...information such as

rating, for the purpose of sharing...included in the catalog, col. 4:64-5:4).

13.   As to claim 9, Heath further discloses wherein said information of said demarked

plurality of files comprises a universal resource locator (hypertext link) for said

demarked plurality of files (E.g. see Heath - col. 3:20-27).

14.   As to claim 10, Heath further discloses wherein said information of said

demarked plurality of files comprises an estimated transfer time for said demarked

plurality of files (E.g. see Heath - Fig. 5:508; col. 7:5-32).

15.   As to claim 14, Heath as modified discloses a method of software distribution

comprising:

       a) demarking a subset of a plurality of files stored on a first hand held computer

system to denote a demarked plurality of files (E.g. see Heath - col. 1:47-55, selecting

to download and update on the needed; and at col. 4:63-65 selectively identify and

retrieve required components);

       b) transferring information of said demarked plurality of files to a second hand

held computer system (E.g. see Heath - Fig. 3A Retrieve catalog file from server using

launcher 302 and at col. 4:46-48);

       c) on said second hand held computer system, selecting via a user interface

(E.g. see Sears - user interface on device 140, p. 5 – 6, paragraph 0042) a selected list

indicating at least one of said demarked plurality of files (E.g. Heath - Fig. 2B:23-29);

and

d) responsive to said c), automatically transferring files indicated by said selected list to said second hand held computer system (E.g. Heath - col. 1:49-55, automatically selecting to download and update).

16.   As to claim 15, Heath further discloses wherein at least one of said files corresponding to said selected list transferred from said first hand held computer system to said second hand held computer system is a demonstration version of an application program (E.g. Heath - col. 3:7-20, Information in the downloaded catalog file, which at least includes the list of names and version... information such as rating, for the purpose of sharing, could very well included in the catalog).

17.   As to claim 16, Heath further discloses wherein said demarked plurality of files comprises executable program instructions (E.g. see Heath - col. 1:56-62, executable codes, library files).

18.   As to claim 17, Heath further discloses wherein said demarked plurality of files comprises non-executable information (E.g. see Heath - col. 1:56-62, parameter files, and data files).

19.   As to claim 21, Heath further discloses wherein said transferring files indicated by said selected list is from said 5rst hand held computer system to said second hand held computer system (E.g. Heath - col. 1:49-55).

20.   As to claim 37, Heath as modified discloses a method of software distribution

comprising:

a) maintaining, within a first hand held computer system, a plurality of computer

files, wherein each computer file has associated with it a respective summary

information (E.g. see Heath - col. 3:7-20, Information in the downloaded catalog file,

which at least includes the list of names and version...information such as rating, for the

purpose of sharing...included in the catalog, col. 4:64-5:4);

b) within said first hand held computer system, demarking a subset of said

plurality of computer files (E.g. Heath - refer to the same base of claim 1.1) via a user

interface (E.g. Sears - user interface on device 140, p. 5 – 6, paragraph 0042);

c) in response to a request, transferring summary information of said subset of

files (a list of components) to a second hand held computer system (E.g. Heath - Fig.

3A:306, col. 2:1-5, 3:7-16 and 4:41-48); and

d) in response to said 501 hand held computer system receiving a selected list of

computer files, transferring computer files on said selected list to said second hand held

computer system (E.g. Heath - col. 1:49-55, automatically selecting to download and

update).

21.   As to claim 42, the rejection of base claim 37 is incorporated. Heath further

discloses wherein said summary information comprises:

an identification of a corresponding computer file (E.g. see Heath - col. 3:7-20,

Information in the downloaded catalog file, which at least includes the list of names and

version identifications of the components); and

a description of said corresponding computer file (E.g. see Heath - col. 3:7-20).

22.   As to claim 43, Heath further discloses wherein said description comprises a

rating (E.g. see Heath - Fig. 3A:302-306, Fig. 2B, col. 3:7-20, Information in the

downloaded catalog file, which at least includes the list of names and

version...information such as rating, for the purpose of sharing, could very well included

in the catalog).

23.   As to claim 44, Heath as modified disclose a machine-readable medium including

instructions for a processor, the machine-readable medium comprising:

instructions for permitting demarking (selecting of Heath), via a user interface

(E.g. Sears - user interface on device 140, p. 5 – 6, paragraph 0042), a subset of a

plurality of files (objects of Heath) stored on a first hand held computer system to denote

a demarked plurality of files (E.g. see Heath - col. 1:50-55, selecting to download and

update on the needed; and at col. 4:46-78 selectively identify and retrieve required

components); and

instructions for transferring information of said demarked plurality of files to a

second hand held computer system (E.g. see Heath - Fig. 3A Retrieve catalog file from

server using launcher 302, and at col. 4:46-48).

24.   As to claim 45, Heath as modified disclose a hand held processing device

comprising:

        means for permitting demarking (selecting of Heath), via a user interface (E.g.

Sears - user interface on device 140, p. 5 – 6, paragraph 0042), a subset of a plurality

of files (objects of Heath) stored on a first hand held computer system to denote a

demarked plurality of files (E.g. see Heath - col. 1:50-55, selecting to download and

update on the needed; and at col. 4:46-78 selectively identify and retrieve required

components); and

        means for transferring information of said demarked plurality of files to a second

hand held computer system (E.g. see Heath - Fig. 3A Retrieve catalog file from server

using launcher 302, and at col. 4:46-48).

25.   **Claim 11-13, 18-20, 22-36 and 38-41 are rejected under 35 U.S.C. 103(a) as**

being unpatentable over Heath and Sears further in view of U.S. Patent No.

6,372,974 to Gross et al. (hereinafter referred to as Gross, cited in the previous

office action).

26.   As to claims 11 and 18, the rejection of base claims 1 and 14 are incorporated.

Heath as modified does not explicitly disclose the remaining features of claims 11 and

18.

However, Gross teaches wherein said transferring is performed wirelessly (E.g. see Gross - col. 2:3-14).

27.   Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the features taught by Gross with those taught by Heath as modified to also adopt the method of transferring data wirelessly as such method is well known within an open-architecture networks.

28.   As to claims 12 and 19, the rejection of base claims 11 and 14 are incorporated. Heath as modified does not explicitly disclose the remaining features of claims 12 and 19.   However, Gross teaches wherein said transferring is performed via infrared light signaling (E.g. see Gross - 2:3-14).

29.   Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the features taught by Gross with those taught by Heath as modified to also adopt the method of transferring data by using the infrared light signaling as file transferring means via infrared light is a well known established protocols.

30.   As claims 13 and 20, the rejection of base claims 11 and 14 are incorporated. Heath as modified does not explicitly disclose the remaining features of claims 13 and 20.   However, Gross teaches wherein said transferring is performed automatically in response to a communication between said first hand held computer system and said

second hand held computer system, wherein the communications conforms to a standard wireless communication protocol (E.g. see Gross - 2:3-14).

31.   Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the features taught by Gross with those taught by Heath as modified to also adopt the method of transferring data by using the Bluetooth as the file transferring means via Bluetooth is a well known established protocols.

32.   As to claim 22, the rejection of base claim 14 is incorporated. Heath as modified does not explicitly disclose the remaining features of claims 22.

However, Gross teaches wherein said transferring files indicated by said selected list is from another hand held computer system to said second hand held computer system (E.g. Gross - col. 2:54-60, the player selects the file or files to be transferred).

33.   Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the features taught by Gross with those taught by Heath as modified to transfer files via a selected list for the benefit of providing a hand held computer system in specifying a selection of files to be transferred from another hand held computer system.

34.   As to claim 23, Heath as modified discloses a hand held computer system comprising a memory coupled to a bus, said memory comprising instructions which when executed implement a method of software distribution, said method comprising:

a) demarking via a user interface (E.g. see Sears - user interface on device 140,

p. 5 – 6, paragraph 0042) a subset of a plurality of files stored on said hand held

computer system to denote a demarked plurality of files (E.g. see Heath - col. 1:47-55,

selecting to download and update on the needed; and at col. 4:63-65 selectively identify

and retrieve required components); and

′ b) transferring information of said demarked plurality of files to another hand held

computer system (E.g. see Heath - Fig. 3A Retrieve catalog file from server using

launcher 302, and at col. 4:46-48). Health as modified does not specifically disclose the

remaining features of claim 23.

However, Gross teaches a bus (See Gross - FIG. 1); a processor coupled to said

bus (E.g. see Gross - FIG. 2:24); a wireless transceiver coupled to said bus for

transferring information to other computer systems (E.g. see Gross - FIG. 1:14).

35.   Therefore, it would have been obvious to a person having ordinary skill in the art

at the time the invention was made to combine the features taught by Gross with those

taught by Heath as modified to also include the wireless interface for the benefit of

dynamically transferring content directly between portable devices in a client-server

environment via some wireless transferring means (E.g. Gross - title, col. 1 :7-9 and

1:33:37., col. 2:12-14), and being independent of accessibility to a host computer (E.g.

see Gross – col. 2:1-2).

36.   As to claim 24, the rejection of base claim 23 is incorporated. Heath further

discloses wherein said demarked plurality of files comprises executable program

instructions (E.g. see Heath - œ1. 1 :56-62, executable codes, library files).

37.   As to claim 25, the rejection of base claim 23 is incorporated. Heath further

discloses wherein said demarked plurality of files comprises non-executable information

(E.g. see Heath - col. 1:56-62, parameter files, and data files).

38.   As to claim 26, the rejection of base claim 23 is incorporated. Heath further

discloses wherein said information of said demarked plurality of files comprises a rating

of said demarked plurality of files (E.g. see Heath - Fig. 3A:302-306, Fig. 2B, col. 3:7-

20, Information in the downloaded catalog file, which at least includes the list of names

and version... information such as rating, for the purpose of sharing, could very well

included in the catalog).

39.   As to claim 27, the rejection of base claim 23 is incorporated. Heath further

discloses wherein said information of said demarked plurality of files comprises titles

(names) of said demarked plurality of files (E.g. see Heath - col. 3:12-16, includes the

list of names and version id).

40.   As to claim 28, the rejection of base claim 23 is incorporated. Heath further

discloses wherein said information of said demarked plurality of files comprises storage

requirements of said demarked plurality of files (E.g. see Heath - col. 4:64-5:4, the
catalog file includes at 324 a version identification, code or data size).

41.   As to claims 29 and 30, the rejection of base claims 23 and 29 are respectively
incorporated. Heath further discloses wherein said information of said demarked
plurality of files comprises an alphanumerical summary of said demarked plurality of
files (E.g. see Heath - col. 3:7-20, Information in the downloaded catalog file, which at
least includes the list of names and version... information such as rating, for the purpose
of sharing... included in the catalog, col. 4:64-5:4).

42.   As to claim 31, Heath further discloses wherein said information of said
demarked plurality of files comprises a universal resource locator (hypertext link) for
said demarked plurality of files (E.g. see Heath - col. 3:20-27).

43.   As to claim 32, Heath further discloses wherein said information of said
demarked plurality of files comprises an estimated transfer time for said demarked
plurality of files (E.g. see Heath - Fig. 5:508; col. 7:5-32).

44.   As to claim 33, the rejection of base claim 23 is incorporated. Heath as modified
does not explicitly disclose the remaining features of claim 33.

        However, Gross teaches the transferring is performed wirelessly (E.g. see Gross
- col. 2:3-14).

45.   Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the features taught by Gross with those taught by Heath as modified to adopt the method of transferring files wirelessly as such method is well known within an open-architecture networks.

46.   As to claim 34, the rejection of base claim 33 is incorporated. Heath as modified does not explicitly disclose the remaining features of claim 34.

       However, Gross teaches wherein said transferring is performed via infrared light signaling (E.g. see Gross - 2:3-14).

47.   Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the features taught by Gross with those taught by Heath as modified to also adopt the method of transferring data by using the infrared light signaling as file transferring means via infrared light is a well known established protocols.

48.   As to claim 35, the rejection of base claim 33 is incorporated. Heath as modified does not explicitly disclose the remaining features of claim 35.

       However, Gross teaches wherein said transferring is performed automatically in response to a standard wireless communication protocol between said first hand held computer system and said second hand held computer system (E.g. see Gross - 2:3-14).

49.   Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the features taught by Gross with those taught by Heath as modified to also adopt the method of transferring data by using the Bluetooth as the file transferring means via Bluetooth is a well known established protocols.

50.   As to claim 36, the rejection of base claim 23 is incorporated. Heath further discloses wherein said method further comprises:

in response to a selected list generated by said another hand held computer, automatically transferring files indicated by said selected list from said hand held computer system to said another hand held computer system (E.g. Heath – col. 1:49-55, automatically selecting to download and update).

51.   As to claim 38, the rejection of base claim 37 is incorporated. Heath as modified does not explicitly disclose the remaining features of claim 38.

However, Gross teaches wherein said transferring are performed wirelessly between first and second hand held computer systems (E.g. see Gross - col. 2:3-14).

52.   Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the features taught by Gross with those taught by Heath as modified to adopt the method of transferring files wirelessly as such method is well known within an open-architecture networks.

53.   As to claim 39, the rejection of base claim 38 is incorporated. Heath as modified

does not explicitly disclose the remaining features of claim 39.

        However, Gross teaches wherein said transferring is performed using infrared

communication (E.g. see Gross – col. 2:3-14).

54.   Therefore, it would have been obvious to a person having ordinary skill in the art

at the time the invention was made to combine the features taught by Gross with those

taught by Heath as modified to also adopt the method of transferring data by using the

infrared light signaling as file transferring means via infrared light is a well known

established protocols.

55.   As to claim 40, the rejection of base claim 38 is incorporated. Heath as modified

does not explicitly disclose the remaining features of claim 40.

        However, Gross teaches wherein said transferring are performed using standard

wireless communication protocol (E.g. see Gross - col. 2:3-14).

56.   Therefore, it would have been obvious to a person having ordinary skill in the art

at the time the invention was made to combine the features taught by Gross with those

taught by Heath as modified to also adopt the method of transferring data by using the

Bluetooth as the file transferring means via Bluetooth is a well known established

protocols.

57.   As to claim 41, the rejection of base claim 37 is incorporated. Heath further

discloses wherein comprising said second hand held computer system generating said

selected list in response to receiving said summary information of said subset of files as

transferred in said second hand held computer system (E.g. Heath - Fig. 28:23-29).

Response to Arguments

58.   Applicant's arguments filed April 4, 2005 have been fully considered but they are

not persuasive. In response to the Non-Final Office Action dated January 3, 2005,

applicant argues:

(1) Heath is completely devoid of any disclosure or suggestion that the

information of the demarked plurality of files comprises a rating of the demarked

plurality of files (p. 13, lines 25 – 27); and

(2) Heath does not teach that at least one of the files transferred is a

demonstration version of an application program (p. 14, line 23 – p. 15, line 2).

As to argument (1), examiner respectfully disagrees and notes that Heath

discloses reporting the program usage (col. 3, lines 7 – 20) and notes that the usage of

a program is related to its rating. For example, a high the program usage would equate

to a higher program rating. In addition, Sears teaches program ratings (E.g. user

ranking of applications; p. 4, paragraph 0038).

In response to argument (2), examiner respectfully disagrees and notes that

Heath teaches program versions (E.g. component versions; col. 5, lines 40 - 55) and

notes that earlier versions of the programs could be demonstration versions because

the program may not be fully developed.

59.   Examiner respectfully notes that applicant's arguments with regards to independent claims 1, 14, 23, 37, 44 and 45 are moot in view of the new ground(s) of rejection. These amended claims includes the new limitation "a user interface" which necessitated the new reference to Sears.

Conclusion

60.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,088,730 to Kato et al. teaches improved information processing apparatus and method for controlling the same, which enables to smoothly transfer data.

61.   Applicant's amendment to the claims includes the new limitation "via a user interface" which necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later
than SIX MONTHS from the date of this final action.

62.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768.
The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for
the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
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you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
Examiner
Art Unit 2194

lbz

MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100